

## **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions and listings of the claims in this application:

1. - 48. (Cancelled)

49. (Previously Presented) An implantable orthopaedic prosthesis, comprising:

a laminar composite bearing having (i) radiation crosslinked layer of polyethylene; and (ii) a non-crosslinked layer of polyethylene molded to said crosslinked layer of polyethylene at a melt-fused interface.

50. (Previously Presented) The implantable orthopaedic prosthesis of claim 49, wherein said radiation crosslinked layer of polyethylene and said non-crosslinked layer of polyethylene are compression molded to one another.

51. Cancelled.

52. (Previously Presented) The implantable orthopaedic prosthesis of claim 49, wherein:

said radiation crosslinked layer of polyethylene has an articulating surface defined therein, and

said non-crosslinked layer of polyethylene has an engaging surface defined therein which is adapted to be secured to an acetabulum of a patient.

53. (Withdrawn) The implantable bearing of claim 49, wherein:  
said crosslinked layer of polymer has an articulating surface defined therein, and  
said non-crosslinked layer of polymer has an engaging surface defined therein  
which is adapted to be secured to a glenoid of a patient.

54. (Withdrawn) The implantable bearing of claim 49, wherein:  
said crosslinked layer of polymer has an articulating surface defined therein, and  
said non-crosslinked layer of polymer has an engaging surface defined therein  
which is adapted to be secured to a tibia of a patient.

55. (Previously Presented) The implantable orthopaedic prosthesis of claim 49,  
wherein said radiation crosslinked layer of polyethylene has an articulating surface defined  
therein.

56. - 124. (Cancelled)

125. (New) An implantable orthopaedic prosthesis, comprising:  
a laminar composite bearing having (i) a first layer of polyethylene which is  
radiation crosslinked to a first degree; and (ii) a second layer of polyethylene molded to said first  
layer of polyethylene at a melt-fused interface, said second layer of polyethylene is crosslinked  
to a second degree that is different than said first degree.

126. (New) The implantable orthopaedic prosthesis of claim 125, wherein said  
second degree is less than said first degree.

127. (New) The implantable orthopaedic prosthesis of claim 126, wherein said first layer of polyethylene has an articulating surface defined therein.

128. (New) The implantable orthopaedic prosthesis of claim 125, wherein said first layer of polyethylene and said second layer of polyethylene are compression molded to one another.

129. (New) The implantable orthopaedic prosthesis of claim 125, wherein:  
said first layer of polyethylene has an articulating surface defined therein, and  
said second layer of polyethylene has an engaging surface defined therein which is adapted to be secured to an acetabulum of a patient.

130. (New) The implantable bearing of claim 125, wherein:  
said first layer of polyethylene has an articulating surface defined therein, and  
said second layer of polyethylene has an engaging surface defined therein which is adapted to be secured to a glenoid of a patient.

131. (New) The implantable bearing of claim 125, wherein:  
said first layer of polyethylene has an articulating surface defined therein, and  
said second layer of polyethylene has an engaging surface defined therein which is adapted to be implanted into a tibia of a patient.

132. (New) The implantable orthopaedic prosthesis of claim 125, wherein the second layer of polyethylene comprises radiation crosslinked polyethylene.